

ABSTRACT

A method of producing a carbon nanostructure is provided which can increase evenness of a shape and a purity of the carbon nanostructure and can reduce a

5 production cost. In a method of producing a carbon nanostructure, a carbon crystal is grown by vapor phase epitaxy from a crystal growth surface of a catalyst base (17) including a catalyst material (11), and the catalyst base (17) is formed by diameter-reduction processing. The catalyst base (17) is preferably formed as an aggregate including an arrangement of a plurality of catalyst structures each formed with a non-
10 catalyst material (12), a material not having a substantial catalytic function for growth of the carbon crystal, formed on at least a portion of a side surface of the catalyst material (11) of a columnar shape having the crystal growth surface as a top surface. In addition, a non-catalyst material (15) is preferably formed on at least a portion of a side surface of the aggregate, and the catalyst structures preferably have variations of at most
15 CV 10% in surface areas of the catalyst material (11) on the crystal growth surface.